

## Abstract

The present invention relates to a method for transmitting data, in which a first signature (S) is formed according to a specifiable signature formation method (SBV) as a function of the data (D) to be transmitted, the first signature (S) is transmitted together with the data (D), a 5 second signature (S') is formed according to the signature formation method as a function of the transmitted data (D') and the first signature (S) is compared with the second signature (S'). To reduce the likelihood of fault masking in monitoring the transmission of the data (D) using signature analysis, a provision is made to invert the data (D) to be transmitted, to form the first signature (S) according to the specifiable signature formation method (SBV) as a function of the data (D) to be transmitted and of the inverted Data (D<sub>i</sub>), to transmit the first 10 signature (S) and the data (D), to invert the transmitted data (D'), to form the second signature (S') according to the signature formation method (SBV) as a function of these inverted data (D<sub>i</sub>') and the transmitted data (D'), and to compare the first signature (S) with the second signature (S'). Figure